

stitches, which include the anterior uterine wall, the anterior vaginal wall is closed. The vaginal wound is then closed. In closing the anterior vaginal wound, two important stitches must be inserted: (1) The most anterior stitch must be so placed as to pass through the vaginal wall picking up the deep fascia lying laterally to the urethra, and then passing through the fundus rather high up, coming out in the reverse order on the other side. This tucks the bladder well up and places the fundus snugly under the pubes. (2) The other stitch of importance is the one in the anterior cervix, placed so as to make a firm union of perimetrium, uniting in front of the cervix, and in this way the cervix is pushed well posterior. The short arm of the vaginal incision is now stitched laterally, so as to elongate the anterior vaginal wall. The cervix may be repaired or amputated as one sees fit, but here it must be borne in mind that the bladder is often dragged far down on the anterior wall of the cervix, especially when elongated. If one proceeds to do the Mayo method the short arm of the inverted "T" incision is carried around the cervix and a vaginal hysterectomy is done, the broad ligament and the perimetrium being united in the center, and this brought down as a shelving portion, taking the same place that the uterus takes in the Wertheim-Watkins operation. This elevates the bladder and gets rid of the cystocele at the same time preventing any hernia of the pelvis. The next, and very essential step, is the repair of the perineum.

Radiation of Uterine Cancer.—For purposes of classification and treatment, Boggs (*Am. Jour. Roentgenology*, 1920, vii, 202) divides cancer of the cervix into four groups: (1) Early cases, where the growth or ulceration is limited to a part of the cervix and does not extend into the vaginal wall. Even in these early cases recurrences take place, and even metastases into the glands may have occurred before the operation. (2) Where the process is more advanced and clinically the involvement is still limited to the tissues of the uterus because the organ is freely movable. Cases of this class may include cauliflower growths, which protrude from the cervix and often fill the greater part of the vagina. Even in these cases the cancer cells may not have reached the pelvic lymphatics. This is a class which will derive great benefit from anteooperative treatment, and by such procedure the end-result should be better. (3) Where the disease is further advanced and the carcinoma extends into the vaginal wall. There is slight fixation of the uterus, but clinically there is not extensive involvement of the broad ligaments. If there is no glandular involvement, which we can never determine clinically (although, as before stated, the glands are often free in cases of this class), rather a high percentage may be clinically cured by radium treatment. Time alone will tell whether or not we should depend upon radium alone, even if we have obtained brilliant results by radium in a number of instances. (4) Cases of carcinoma of the cervix, with marked fixation of the uterus, the disease extending into one or both broad ligaments with involvement of the vaginal wall and the greater part of the cervix destroyed. In many of these cases glandular involvement has taken place and in some instances metastases have extended into the liver. These cases often will derive a great deal of benefit from radium and a local or clinical cure frequently will take place. But even if

metastases have been extensive the patient may remain free from cancer symptoms from one to three or more years. A cure might be effected, but with our present method of treatment we always expect the patient to die from metastases rather than look for a permanent cure. When it is considered that about one-third of the cases of cancer of the cervix that receive no treatment die within a year without an operation, that a large percentage of the remainder die within two years from the first manifestation of the disease and that very few live three years, it is apparent that the amount of palliation and prolongation of life from radium treatment (and the fact that many of them die of internal metastases without return of the local symptoms), mean much to the patient. Today radium is indicated as a palliative measure for hopeless inoperable and recurrent cases as an anteoperative procedure and for prophylaxis after surgical removal. Lately radium is being used by some physicians for primary cases in carcinoma of the cervix when the disease extends into the cervical canal, because nearly all of those cases are followed by recurrence even in the early cases after operation. The malignant process in these cases will disappear by radium rather promptly. Time alone will tell whether radium without operation is advisable. Radium is a specific palliative in operable cancer of the cervix and uterus. It will clinically cure some of the cases, and subjective improvement is noticed in a certain percentage of others. However, recurrence takes place in many of these clinically cured cases within two or three years. The patient during this interval regains normal health and can lead a useful life. If a recurrence takes place, as a rule, the patient suffers little in comparison with those who had no radium treatment. In these hopeless cases, the offensive discharge and hemorrhage usually completely disappear within from two to four weeks. The cessation of discharge which often is so offensive to the family and even to the patient is a remarkable feature. The local condition changes in character within from two to four weeks after the treatment, the mass begins to contract and shrink, and continues to decrease in size. This is more marked in some instances than in others. The deodorizing and sterilizing effect of radium is very remarkable in the inoperable or recurrent cases where there is a broken down mass of carcinomatous tissue or a crater-like sloughing extending into the broad ligament. These cases have a discharge with a very foul odor and run an irregular temperature. One application of radium will alleviate these symptoms and means much to the patient.

Vaginal Palpation of the Ureters.—The normal ureter, according to JUDD (*New York Med. Jour.*, 1920, cxi, 986), is easily palpable from the side of the pelvis, just above the spine of the ischium, although in some cases it lies as much as 4 cm. above the spine, where it lies underneath the peritoneum and previous to entering the broad ligament in the course of its entrance into the bladder. Undoubtedly in the case of a thickened ureter from ureteritis, or from any cause whatever, it can be easily palpable to a far greater extent, as has been exemplified in some of his own findings. Contrary to the general method advised, which is that palpation be made for the ureter in the anterior vaginal fornix, he suggests beginning at the lateral vaginal fornix, using the left index